

Oral-health-related quality of life in patients with cancer: cultural adaptation and the psychometric testing of the Persian version of EORTC QLQ-OH17

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Abstract

Purpose To evaluate the validity, reliability, responsiveness to treatment, and gender invariance of the Persian version of the European Organization for Research and Treatment of Cancer Oral Health Questionnaire (QLQ-OH17) among Iranian cancer patients.

Methods Cancer patients ($n=729$) from three oncology centers in Tehran and Qazvin were recruited. A forward and backward translation procedure was performed to develop a

culturally acceptable version of Persian QLQ-OH17. Internal consistency and test–retest reliability of the QLQ-OH17 was assessed. In addition, convergent and discriminant validity, concurrent validity, construct validity, and known-groups validity were evaluated. The factor structure of the questionnaire was examined by exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). Responsiveness to change was measured in an independent sample of patients with head and neck cancer undergoing radiotherapy. Finally, factorial invariance of the QLQ-OH17 was assessed across gender.

Results The Persian version of QLQ-OH17 showed good internal consistency (Cronbach's alpha coefficients of 0.71–0.83) and reliability on repeated administration (intraclass correlation coefficients of 0.85–0.94). Persian QLQ-OH17 exhibited the original four-factor structure. Patients who perceived good oral health and satisfaction with their mouth reported significantly better oral-health-related quality of life (OHRQoL) than those who perceived poor oral health and dissatisfied with their mouth. Similarly, those who perceived a need for dental treatment reported significantly poorer OHRQoL than those who have not perceived any treatment need. Older patients, females, and those experiencing greater caries had poorer QoL than their comparative counterparts. All QLQ-OH17 subscales were correlated with QLQ-C30 subscales and global QoL. Both male and female patients with cancer interpreted items on the QLQ-OH17 in a similar manner. The QLQ-OH17 was found to be responsive to treatment in a sample of head and neck cancer patients.

Conclusions The Persian version of QLQ-OH17 is a valid and reliable questionnaire for assessing OHRQoL in Iranian patients with various cancers.

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